

Forestland Productivity and Management  
Newaygo County, Michigan

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation.)

Map symbol and soil name	Erosion hazard potential	Site preparation limitations	Windthrow hazard potential	Potential Seedling Mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
2: Glendora-----	Slight	Well suited	Slight	High Wetness	Quaking aspen----- Red maple----- Silver maple----- Swamp white oak----- White ash-----	--- 65 90 --- 65	--- 43.00 43.00 --- 57.00	---
3: Adrian-----	Slight	Well suited	Severe Wetness	High Wetness	Green ash----- Northern white-cedar Quaking aspen----- Red maple----- Silver maple----- Tamarack-----	69 --- 60 53 78 45	57.00 --- 57.00 29.00 29.00 29.00	---
4A: Cosad-----	Slight	Well suited	Slight	High  Wetness	Eastern white pine--  Quaking aspen----- Red maple-----	70  --- 70	*****  --- 43.00	Norway spruce, eastern white pine, northern white-cedar, white spruce.
5B: Pipestone-----	Slight	Well suited	Slight	High  Wetness	American basswood---  Eastern cottonwood-- Eastern white pine-- Quaking aspen----- Red maple----- White ash-----	56  --- 64 --- 65 ---	43.00  --- ***** 43.00 ---	Eastern white pine, white spruce.
8: Cohoctah-----	Slight	Well suited	Slight	High  Wetness	Bitternut hickory---  Red maple----- Silver maple----- Swamp white oak----- White ash-----	---  56 80 --- ---	---  29.00 29.00 --- ---	Eastern white pine, northern white-cedar, white spruce.
10B: Sparta-----	Slight	Well suited	Slight	Low	Black oak-----  Jack pine----- Northern red oak----	---  55 47	---  86.00 29.00	Eastern white pine, jack pine, red pine.
10B3:								

\*See footnote at end of table.

Forestland Productivity and Management--Continued

Map symbol and soil name	Erosion hazard potential	Site preparation limitations	Windthrow hazard potential	Potential Seedling Mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
Sparta-----	Slight	Well suited	Slight	Low	Black oak-----	---	---	Eastern white pine, jack pine, red pine.
					Jack pine-----	55	86.00	
					Northern red oak----	47	29.00	
10C: Sparta-----	Slight	Well suited	Slight	Low	Black oak-----	---	---	Eastern white pine, jack pine, red pine.
					Jack pine-----	55	86.00	
					Northern red oak----	47	29.00	
11: Martisco-----	Slight	Well suited	Severe Wetness	High Wetness	Red maple-----	55	29.00	---
13B: Selfridge-----	Slight	Well suited	Slight	Low	American basswood---	---	---	Eastern white pine, imperial Carolina poplar, northern white-cedar, white spruce.
					American beech-----	---	---	
					Bigtooth aspen-----	---	---	
					Black cherry-----	---	---	
					Northern red oak----	---	---	
					Quaking aspen-----	70	86.00	
					Red maple-----	---	---	
					Sugar maple-----	---	---	
Capac-----	Slight	Well suited	Slight	Low	American basswood---	---	---	Eastern white pine, northern red oak, white spruce.
					American beech-----	---	---	
					Black cherry-----	---	---	
					Northern red oak----	65	57.00	
					Quaking aspen-----	---	---	
					Red maple-----	---	---	
					Sugar maple-----	---	---	
					White ash-----	---	---	
14B: Dixboro-----	Slight	Well suited	Slight	Low	American basswood---	---	---	Eastern white pine, northern red oak, white spruce.
					Black oak-----	---	---	
					Northern red oak----	65	57.00	
					Red maple-----	---	---	
					Shagbark hickory-----	---	---	
15B:					White oak-----	---	---	

\*See footnote at end of table.

Forestland Productivity and Management--Continued

Map symbol and soil name	Erosion hazard potential	Site preparation limitations	Windthrow hazard potential	Potential Seedling Mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
Capac-----	Slight	Well suited	Slight	Low	American basswood---	---	---	Eastern white pine, northern red oak, white spruce.
					American beech-----	---	---	
					Black cherry-----	---	---	
					Northern red oak----	65	57.00	
					Quaking aspen-----	---	---	
					Red maple-----	---	---	
					Sugar maple-----	---	---	
					White ash-----	---	---	
16: Napoleon-----	Slight	Well suited	Severe Wetness	High Wetness	Quaking aspen-----	---	---	Tamarack.
					Red maple-----	78	43.00	
					Tamarack-----	---	---	
17B: Spinks-----	Slight	Well suited	Slight	Low	Black cherry-----	---	---	Eastern white pine, red pine.
					Black oak-----	---	---	
					Northern red oak----	66	57.00	
					Red maple-----	---	---	
					White oak-----	---	---	
Metea-----	Slight	Well suited	Slight	Low	American basswood---	---	---	Red pine, white spruce.
					Black cherry-----	---	---	
					Black walnut-----	---	---	
					Northern red oak----	68	57.00	
					Red maple-----	---	---	
					Sugar maple-----	---	---	
					White oak-----	---	---	
Coloma-----	Slight	Well suited	Slight	Low	Black oak-----	---	---	Red pine.
					Eastern white pine--	---	---	
					Jack pine-----	---	---	
					Northern pin oak----	49	29.00	
					Red maple-----	---	---	
17C: Coloma-----	Slight	Well suited	Slight	Low	Black oak-----	---	---	Red pine.
					Eastern white pine--	---	---	
					Jack pine-----	---	---	
					Northern pin oak----	49	29.00	
					Red maple-----	---	---	
Metea-----	Slight	Well suited	Slight	Low	American basswood---	---	---	Red pine, white spruce.
					Black cherry-----	---	---	
					Black walnut-----	---	---	
					Northern red oak----	68	57.00	
					Red maple-----	---	---	
					Sugar maple-----	---	---	
					White oak-----	---	---	

\*See footnote at end of table.

Forestland Productivity and Management--Continued

Map symbol and soil name	Erosion hazard potential	Site preparation limitations	Windthrow hazard potential	Potential Seedling Mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
Spinks-----	Slight	Well suited	Slight	Low	Black cherry-----	---	---	Eastern white pine, red pine.
					Black oak-----	---	---	
					Northern red oak----	66	57.00	
					Red maple-----	---	---	
					White oak-----	---	---	
17D: Spinks-----	Moderate	Poorly suited	Slight	Low	Black cherry-----	---	---	Eastern white pine, red pine.
	Slope/erodibility	Slope			Black oak-----	---	---	
					Northern red oak----	66	57.00	
					Red maple-----	---	---	
					Sugar maple-----	---	---	
					White oak-----	---	---	
Metea-----	Moderate	Poorly suited	Slight	Low	American basswood---	---	---	Red pine, white spruce.
	Slope/erodibility	Slope			Black cherry-----	---	---	
					Black walnut-----	---	---	
					Northern red oak----	68	57.00	
					Sugar maple-----	---	---	
					White oak-----	---	---	
19B: Covert-----	Slight	Well suited	Slight	Low	American basswood---	---	---	Eastern white pine, red pine.
					American beech-----	---	---	
					Black cherry-----	---	---	
					Eastern white pine--	---	---	
					Northern red oak----	67	57.00	
					Quaking aspen-----	---	---	
					Red maple-----	66	43.00	
					White oak-----	---	---	
20: Granby-----	Slight	Well suited	Severe	High	American basswood---	---	---	Austrian pine, eastern white pine, northern white-cedar, white spruce.
			Wetness	Wetness	Quaking aspen-----	---	---	
					Red maple-----	68	43.00	
					Silver maple-----	82	29.00	
					White ash-----	---	---	
21: Kingsville----	Slight	Well suited	Severe	High	Bigtooth aspen-----	67	72.00	Eastern white pine, white spruce.
			Wetness	Wetness	Green ash-----	---	---	
					Quaking aspen-----	67	72.00	
					Red maple-----	65	43.00	
					Silver maple-----	---	---	
					Swamp white oak-----	63	57.00	
					White ash-----	---	---	
22B:								

\*See footnote at end of table.

Forestland Productivity and Management--Continued

Map symbol and soil name	Erosion hazard potential	Site preparation limitations	Windthrow hazard potential	Potential Seedling Mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
Scalley-----	Slight	Well suited	Slight	Low	Black cherry-----	---	---	Black walnut, eastern white pine, red pine, white spruce.
					Black walnut-----	---	---	
					Northern red oak----	---	---	
					Sugar maple-----	61	43.00	
					White ash-----	---	---	
					White oak-----	---	---	
22C: Scalley-----	Slight	Well suited	Slight	Low	Black cherry-----	---	---	Black walnut, eastern white pine, red pine, white spruce.
					Black walnut-----	---	---	
					Northern red oak----	---	---	
					Sugar maple-----	61	43.00	
					White ash-----	---	---	
					White oak-----	---	---	
22D: Scalley-----	Moderate	Poorly suited	Slight	Low	Black cherry-----	---	---	Black walnut, eastern white pine, red pine, white spruce.
					Black walnut-----	---	---	
					Northern red oak----	---	---	
					Sugar maple-----	61	43.00	
					White ash-----	---	---	
					White oak-----	---	---	
23: Lamson-----	Slight	Well suited	Severe	High	Eastern white pine--	65	*****	Eastern white pine, northern white-cedar, white spruce.
			Wetness	Wetness	Pin oak-----	60	43.00	
					Quaking aspen-----	---	---	
					Red maple-----	65	43.00	
					Swamp white oak-----	---	---	
24: Edwards-----	Slight	Well suited	Severe	High	Green ash-----	---	---	---
			Wetness	Wetness	Red maple-----	56	29.00	
					Silver maple-----	---	---	
					Swamp white oak-----	---	---	
					White ash-----	---	---	
27:								

\*See footnote at end of table.

Forestland Productivity and Management--Continued

Map symbol and soil name	Erosion hazard potential	Site preparation limitations	Windthrow hazard potential	Potential Seedling Mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
Granby-----	Slight	Well suited	Severe	High	American basswood---	---	---	Eastern white pine, northern white-cedar, white spruce.
			Wetness	Wetness	Quaking aspen-----	---	---	
					Red maple-----	68	43.00	
					Silver maple-----	82	29.00	
					White ash-----	---	---	
28B: Watseka-----	Slight	Well suited	Slight	Low	Eastern white pine--	---	---	European larch, Norway spruce, eastern white pine, white spruce.
					Quaking aspen-----	70	86.00	
					Red maple-----	---	---	
29B: Coloma-----	Slight	Well suited	Slight	Low	Black oak-----	---	---	Red pine.
					Eastern white pine--	---	---	
					Jack pine-----	---	---	
					Northern pin oak----	49	29.00	
					Red maple-----	---	---	
29C: Coloma-----	Slight	Well suited	Slight	Low	Black oak-----	---	---	Red pine.
					Eastern white pine--	---	---	
					Jack pine-----	---	---	
					Northern pin oak----	49	29.00	
					Red maple-----	---	---	
29D: Coloma-----	Moderate	Poorly suited	Slight	Low	Black oak-----	---	---	Red pine.
	Slope/erod ibility	Slope			Eastern white pine--	---	---	
					Jack pine-----	---	---	
					Northern pin oak----	49	29.00	
					Red maple-----	---	---	
32: Carlisle-----	Slight	Well suited	Severe Wetness	High Wetness	Green ash-----	---	---	---
					Quaking aspen-----	---	---	
					Red maple-----	56	29.00	
					Silver maple-----	82	29.00	
					Swamp white oak-----	---	---	
36B: Del Rey-----	Slight	Well suited	Slight	High	American basswood---	56	43.00	Eastern white pine, northern red oak, northern white-cedar, white spruce.
				Wetness	Northern red oak----	56	43.00	
					Red maple-----	56	29.00	
					White ash-----	56	43.00	
					White oak-----	56	43.00	
39B:								

\*See footnote at end of table.

Forestland Productivity and Management--Continued

Map symbol and soil name	Erosion hazard potential	Site preparation limitations	Windthrow hazard potential	Potential Seedling Mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
Boyer-----	Slight	Well suited	Slight	Low	American basswood---	---	---	Eastern white pine, northern red oak, red pine, white oak.
					Black oak-----	---	---	
					Northern red oak----	66	57.00	
					Sugar maple-----	---	---	
					White oak-----	---	---	
39C: Boyer-----	Slight	Well suited	Slight	Low	American basswood---	---	---	Eastern white pine, northern red oak, red pine, white oak.
					Black oak-----	---	---	
					Northern red oak----	66	57.00	
					Sugar maple-----	---	---	
					White oak-----	---	---	
39D: Boyer-----	Moderate	Poorly suited	Slight	Low	American basswood---	---	---	Eastern white pine, northern red oak, red pine, white oak.
	Slope/erodibility	Slope			Black oak-----	---	---	
					Northern red oak----	66	57.00	
					Sugar maple-----	---	---	
					White oak-----	---	---	
39E: Boyer-----	Moderate	Poorly suited	Slight	Low	American basswood---	---	---	Eastern white pine, northern red oak, red pine, white oak.
	Slope/erodibility	Slope			Black oak-----	---	---	
					Northern red oak----	66	57.00	
					Sugar maple-----	---	---	
					White oak-----	---	---	
40B: Tustin-----	Slight	Well suited	Slight	Low	Black oak-----	55	43.00	Norway spruce, eastern white pine, red pine.
					Eastern white pine--	---	---	
					Northern red oak----	---	---	
					Red pine-----	---	---	
40C:								

\*See footnote at end of table.

Forestland Productivity and Management--Continued

Map symbol and soil name	Erosion hazard potential	Site preparation limitations	Windthrow hazard potential	Potential Seedling Mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
Tustin-----	Slight	Well suited	Slight	Low	Black oak-----	55	43.00	Norway spruce, eastern white pine, red pine.
					Eastern white pine--	---	---	
					Northern red oak----	---	---	
					Red pine-----	---	---	
41B: Marlette-----	Slight	Well suited	Slight	Low	American basswood---	---	---	Black walnut, eastern white pine, red pine, white spruce.
					American beech-----	---	---	
					Black cherry-----	---	---	
					Black oak-----	---	---	
					Eastern white pine--	---	---	
					Northern red oak----	69	57.00	
					Sugar maple-----	65	43.00	
					White ash-----	---	---	
					White oak-----	---	---	
41C: Marlette-----	Slight	Well suited	Slight	Low	American basswood---	---	---	Black walnut, eastern white pine, red pine, white spruce.
					American beech-----	---	---	
					Black cherry-----	---	---	
					Black oak-----	---	---	
					Eastern white pine--	---	---	
					Northern red oak----	69	57.00	
					Sugar maple-----	65	43.00	
					White ash-----	---	---	
					White oak-----	---	---	
41C2: Marlette-----	Slight	Well suited	Slight	Low		---		---
41D: Marlette-----	Moderate	Poorly suited	Slight	Low	American basswood---	---	---	Black walnut, eastern white pine, red pine, white spruce.
	Slope/erod ibility	Slope			American beech-----	---	---	
					Black cherry-----	---	---	
					Black oak-----	---	---	
					Eastern white pine--	---	---	
					Northern red oak----	69	57.00	
					Sugar maple-----	65	43.00	
					White ash-----	---	---	
					White oak-----	---	---	
42B:								

\*See footnote at end of table.

Forestland Productivity and Management--Continued

Map symbol and soil name	Erosion hazard potential	Site preparation limitations	Windthrow hazard potential	Potential Seedling Mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
Metea-----	Slight	Well suited	Slight	Low	American basswood---	---	---	Red pine, white spruce.
					Black cherry-----	---	---	
					Black walnut-----	---	---	
					Northern red oak----	68	57.00	
					Red maple-----	---	---	
					Sugar maple-----	---	---	
Marlette-----	Slight	Well suited	Slight	Low	White oak-----	---	---	Black walnut, eastern white pine, red pine, white spruce.
					American basswood---	---	---	
					Black cherry-----	---	---	
					Black oak-----	---	---	
					Northern red oak----	69	57.00	
					Sugar maple-----	65	43.00	
Spinks-----	Slight	Well suited	Slight	Low	White ash-----	---	---	Eastern white pine, red pine.
					White oak-----	---	---	
					Black cherry-----	---	---	
					Black oak-----	---	---	
					Northern red oak----	66	57.00	
42C: Metea-----	Slight	Well suited	Slight	Low	Red maple-----	---	---	Red pine, white spruce.
					White oak-----	---	---	
					American basswood---	---	---	
					Black cherry-----	---	---	
					Black walnut-----	---	---	
					Northern red oak----	68	57.00	
Marlette-----	Slight	Well suited	Slight	Low	Red maple-----	---	---	Black walnut, eastern white pine, red pine, white spruce.
					Sugar maple-----	---	---	
					White ash-----	---	---	
					White oak-----	---	---	
					American basswood---	---	---	
					Black cherry-----	---	---	
Spinks-----	Slight	Well suited	Slight	Low	Black oak-----	---	---	Eastern white pine, imperial Carolina poplar, red pine.
					Northern red oak----	69	57.00	
					Sugar maple-----	65	43.00	
					White ash-----	---	---	
					White oak-----	---	---	
42C2:					Black cherry-----	---	---	
					Black oak-----	---	---	
					Northern red oak----	66	57.00	
					White oak-----	---	---	

\*See footnote at end of table.

Forestland Productivity and Management--Continued

Map symbol and soil name	Erosion hazard potential	Site preparation limitations	Windthrow hazard potential	Potential Seedling Mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
Marlette-----	Slight	Well suited	Slight	Low		---		---
Metea-----	Slight	Well suited	Slight	Low	American basswood---	---	---	Red pine, white spruce.
					Black cherry-----	---	---	
					Black walnut-----	---	---	
					Northern red oak----	68	57.00	
					Red maple-----	---	---	
					Sugar maple-----	---	---	
					White oak-----	---	---	
Spinks-----	Slight	Well suited	Slight	Low	Black cherry-----	---	---	Eastern white pine, imperial Carolina poplar, red pine.
					Black oak-----	---	---	
					Northern red oak----	66	57.00	
					White oak-----	---	---	
42D: Metea-----	Moderate	Poorly suited	Slight	Low	American basswood---	---	---	Red pine, white spruce.
	Slope/erodibility	Slope			Black cherry-----	---	---	
					Black walnut-----	---	---	
					Northern red oak----	68	57.00	
					Red maple-----	---	---	
					Sugar maple-----	---	---	
					White oak-----	---	---	
Spinks-----	Moderate	Poorly suited	Slight	Low	Black cherry-----	---	---	Eastern white pine, red pine.
	Slope/erodibility	Slope			Black oak-----	---	---	
					Northern red oak----	66	57.00	
					Red maple-----	---	---	
					White oak-----	---	---	
Marlette-----	Moderate	Poorly suited	Slight	Low	American basswood---	---	---	Black walnut, eastern white pine, red pine, white spruce.
	Slope/erodibility	Slope			American beech-----	---	---	
					Black cherry-----	---	---	
					Black oak-----	---	---	
					Eastern white pine--	---	---	
					Northern red oak----	69	57.00	
					Sugar maple-----	65	43.00	
					White ash-----	---	---	
					White oak-----	---	---	
42E:								

\*See footnote at end of table.

Forestland Productivity and Management--Continued

Map symbol and soil name	Erosion hazard potential	Site preparation limitations	Windthrow hazard potential	Potential Seedling Mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
Metea-----	Severe Slope/erod ibility	Poorly suited Slope	Slight	Low	American basswood---	---	---	Red pine, white spruce.
					Black cherry-----	---	---	
					Black walnut-----	---	---	
					Northern red oak----	68	57.00	
					Red maple-----	---	---	
					Sugar maple-----	---	---	
Spinks-----	Severe Slope/erod ibility	Poorly suited Slope	Slight	Low	Black cherry-----	---	---	Eastern white pine, red pine.
					Black oak-----	---	---	
					Northern red oak----	66	57.00	
					Red maple-----	---	---	
					White oak-----	---	---	
43B: Metea-----	Slight	Well suited	Slight	Low	American basswood---	---	---	Red pine, white spruce.
					Black cherry-----	---	---	
					Black walnut-----	---	---	
					Northern red oak----	68	57.00	
					Red maple-----	---	---	
					Sugar maple-----	---	---	
43C: Metea-----	Slight	Well suited	Slight	Low	American basswood---	---	---	Red pine, white spruce.
					Black cherry-----	---	---	
					Black walnut-----	---	---	
					Northern red oak----	68	57.00	
					Red maple-----	---	---	
					Sugar maple-----	---	---	
44B: Spinks-----	Slight	Well suited	Slight	Low	Black cherry-----	---	---	Eastern white pine, red pine.
					Black oak-----	---	---	
					Northern red oak----	66	57.00	
					Red maple-----	---	---	
44C: Spinks-----	Slight	Well suited	Slight	Low	Black cherry-----	---	---	Eastern white pine, red pine.
					Black oak-----	---	---	
					Northern red oak----	66	57.00	
					Red maple-----	---	---	
44D:					White oak-----	---	---	

\*See footnote at end of table.

Forestland Productivity and Management--Continued

Map symbol and soil name	Erosion hazard potential	Site preparation limitations	Windthrow hazard potential	Potential Seedling Mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
Spinks-----	Moderate	Poorly suited	Slight	Low	Black cherry-----	---	---	Eastern white pine, red pine.
	Slope/erodibility	Slope			Black oak-----	---	---	
					Northern red oak----	66	57.00	
					Red maple-----	---	---	
					White oak-----	---	---	
44E: Spinks-----	Moderate	Poorly suited	Slight	Low	Black cherry-----	---	---	Eastern white pine, red pine.
	Slope/erodibility	Slope			Black oak-----	---	---	
					Northern red oak----	66	57.00	
					Red maple-----	---	---	
					White oak-----	---	---	
46B: Perrinton----	Slight	Well suited	Slight	Low	American basswood---	---	---	Eastern white pine, northern red oak, northern white-cedar, white spruce.
					Northern red oak----	69	57.00	
					Red maple-----	---	---	
					Sugar maple-----	---	---	
46C: Perrinton----	Slight	Well suited	Slight	Low	American basswood---	---	---	Eastern white pine, northern red oak, northern white-cedar, white spruce.
					Northern red oak----	69	57.00	
					Red maple-----	---	---	
					Sugar maple-----	---	---	
46D: Perrinton----	Moderate	Poorly suited	Slight	Low	American basswood---	---	---	Eastern white pine, northern red oak, northern white-cedar, white spruce.
	Slope	Slope						
					Northern red oak----	69	57.00	
					Red maple-----	---	---	
					Sugar maple-----	---	---	
46F:					White ash-----	---	---	

\*See footnote at end of table.

Forestland Productivity and Management--Continued

Map symbol and soil name	Erosion hazard potential	Site preparation limitations	Windthrow hazard potential	Potential Seedling Mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
Perrinton----	Very severe	Unsuited	Slight	Low	American basswood----	---	---	Eastern white pine, northern red oak, northern white-cedar, white spruce.
	Slope	Slope			Northern red oak----	69	57.00	
					Red maple-----	---	---	
					Sugar maple-----	---	---	
					White ash-----	---	---	
47B: Toogood-----	Slight	Well suited	Slight	Low	Northern red oak----	---	---	Eastern white pine, red pine.
					Quaking aspen-----	---	---	
					Red pine-----	55	86.00	
					White oak-----	---	---	
47C: Toogood-----	Slight	Well suited	Slight	Low	Northern red oak----	---	---	Eastern white pine, red pine.
					Quaking aspen-----	---	---	
					Red pine-----	55	86.00	
					White oak-----	---	---	
47D: Toogood-----	Moderate	Poorly suited	Slight	Low	Northern red oak----	---	---	Eastern white pine, red pine.
	Slope/erodibility	Slope			Quaking aspen-----	---	---	
					Red pine-----	55	86.00	
					White oak-----	---	---	
49B: Toogood, Moderately wet-----	Slight	Well suited	Slight	Low	Northern red oak----	---	---	Eastern white pine, red pine.
					Quaking aspen-----	---	---	
					Red pine-----	55	86.00	
					White oak-----	---	---	
51B: Thetford-----	Slight	Well suited	Slight	Low	Northern red oak----	---	---	Eastern white pine, white spruce.
					Quaking aspen-----	---	---	
					Red maple-----	65	43.00	
					Swamp white oak-----	---	---	
					White ash-----	---	---	
52: Linwood-----	Slight	Well suited	Severe Wetness	High Wetness	Quaking aspen-----	---	---	---
					Red maple-----	56	29.00	
					Silver maple-----	82	29.00	
53:								

\*See footnote at end of table.

Forestland Productivity and Management--Continued

Map symbol and soil name	Erosion hazard potential	Site preparation limitations	Windthrow hazard potential	Potential Seedling Mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
Parkhill-----	Slight	Well suited	Severe	High	American basswood---	66	57.00	Eastern white pine, white spruce.
			Wetness	Wetness	Pin oak-----	---	---	
					Red maple-----	66	43.00	
					Silver maple-----	91	43.00	
					Swamp white oak----	---	---	
					White ash-----	66	57.00	
55: Sickles-----	Slight	Well suited	Severe	High	American basswood---	---	---	Eastern white pine, white spruce.
			Wetness	Wetness	Eastern cottonwood--	---	---	
					Eastern white pine--	---	---	
					Quaking aspen-----	61	72.00	
					Red maple-----	---	---	
					Swamp white oak----	---	---	
60B: Grattan-----	Slight	Well suited	Slight	Low	Black oak-----	60	43.00	Eastern white pine, red pine.
					Eastern white pine--	62	*****	
					Quaking aspen-----	---	---	
					Red maple-----	61	57.00	
					Sugar maple-----	59	43.00	
					White oak-----	52	43.00	
60C: Grattan-----	Moderate	Well suited	Slight	Low	Black oak-----	60	43.00	Eastern white pine, red pine.
					Eastern white pine--	62	*****	
					Northern red oak----	61	57.00	
					Quaking aspen-----	---	---	
					Red maple-----	61	57.00	
					Sugar maple-----	59	43.00	
60D: Grattan-----	Moderate	Poorly suited	Slight	Low	Black oak-----	60	43.00	Eastern white pine, red pine.
	Slope/erod ibility	Slope			Eastern white pine--	62	*****	
					Northern red oak----	61	57.00	
					Quaking aspen-----	---	---	
					Red maple-----	61	57.00	
					Sugar maple-----	59	43.00	
62:					White oak-----	60	43.00	

\*See footnote at end of table.

Forestland Productivity and Management--Continued

Map symbol and soil name	Erosion hazard potential	Site preparation limitations	Windthrow hazard potential	Potential Seedling Mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
Jebavy-----	Slight	Well suited	Severe	High	Eastern hemlock----	---	---	Eastern white pine, jack pine, white spruce.
			Wetness Rooting depth limitation (severe)	Wetness	Eastern white pine-- Jack pine-----	66 ---	***** ---	
					Quaking aspen----- Red maple-----	---	---	
65: Wauseon-----	Slight	Well suited	Severe Wetness	High Wetness	Silver maple----- Swamp white oak---- White ash-----	80 ---	29.00 ---	Silver maple.
70: Udorthents----	Slight	Well suited	Slight	Low		---		---
72: Udipsamments--	Slight	Well suited	Slight	Low		---		---
82: Alganssee-----	Slight	Well suited	Slight	Moderate	Green ash-----	---	---	Eastern white pine, white spruce.
				Wetness	Quaking aspen----- Red maple----- Silver maple----- Swamp white oak----	60 56 78 ---	57.00 29.00 29.00 ---	
88: Ceresco-----	Slight	Well suited	Slight	Low	Black walnut-----	---	---	
					Northern red oak---- Red maple----- Silver maple----- White ash-----	66 ---	57.00 ---	
90: Aquents-----	Slight	Unsuited Wetness	Severe Wetness	High Wetness		---		---
Histosols-----	Slight	Unsuited Wetness	Severe Wetness	High Wetness		---		---
91B: Plainfield----	Slight	Well suited	Slight	Low	Black oak----- Eastern white pine-- Jack pine----- Red pine----- White oak-----	50 58 49 55 42	29.00 ***** 57.00 86.00 29.00	Red pine.
91C:								

\*See footnote at end of table.

Forestland Productivity and Management--Continued

Map symbol and soil name	Erosion hazard potential	Site preparation limitations	Windthrow hazard potential	Potential Seedling Mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
Plainfield----	Slight	Well suited	Slight	Low	Black oak----- Eastern white pine-- Jack pine----- Red pine----- White oak-----	50 58 49 55 42	29.00 ***** 57.00 86.00 29.00	Red pine.
91D: Plainfield----	Moderate Slope/erodibility	Poorly suited Slope	Slight	Low	Black oak----- Eastern white pine-- Jack pine----- Red pine----- White oak-----	50 58 49 55 42	29.00 ***** 57.00 86.00 29.00	Red pine.
91F: Plainfield----	Severe Slope/erodibility	Unsuited Slope	Slight	Low	Black oak----- Eastern white pine-- Jack pine----- Red pine----- White oak-----	50 58 49 55 42	29.00 ***** 57.00 86.00 29.00	Red pine.
92B: Selfridge----	Slight	Well suited	Slight	Low	American basswood---  American beech----- Bigtooth aspen----- Black cherry----- Northern red oak----- Quaking aspen----- Red maple----- Sugar maple-----	---  --- --- --- 70 --- ---	---  --- --- --- 86.00 --- ---	Eastern white pine, imperial Carolina poplar, northern white-cedar, white spruce.
93: Pits-----	Very severe Horizon table contains no data	Unsuited Horizon table contains no data	Slight	High Horizon table contains no data		---		---
94B: Brems-----	Slight	Well suited	Slight	Low	Black oak-----  Jack pine----- Pin oak----- Red maple----- White oak-----	---  55 59 --- ---	---  72.00 43.00 --- ---	Eastern white pine, jack pine, red pine.
95A:								

\*See footnote at end of table.

Forestland Productivity and Management--Continued

Map symbol and soil name	Erosion hazard potential	Site preparation limitations	Windthrow hazard potential	Potential Seedling Mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
Algansee-----	Slight	Well suited	Slight	Moderate	Green ash-----	---	---	Eastern white pine, white spruce.
				Wetness	Quaking aspen-----	60	57.00	
					Red maple-----	56	29.00	
					Silver maple-----	78	29.00	
					Swamp white oak-----	---	---	
96A: Pipestone-----	Slight	Well suited	Slight	High	American basswood---	56	43.00	Eastern white pine, white spruce.
				Wetness	Eastern white pine--	64	*****	
					Red maple-----	65	43.00	
					White ash-----	---	---	
Kingsville----	Slight	Well suited	Severe	High	Bigtooth aspen-----	67	72.00	Eastern white pine, white spruce.
			Wetness	Wetness	Green ash-----	---	---	
					Quaking aspen-----	67	72.00	
					Red maple-----	65	43.00	
					Silver maple-----	---	---	
					Swamp white oak-----	63	57.00	
97B: Urban Land----	Not rated	Not rated	Not rated	Not rated Horizon table contains no data		---		---
Metea-----	Slight	Well suited	Slight	Low		---		---
Marlette-----	Slight	Well suited	Slight	Low		---		---
98F: Plainfield----	Severe	Unsuited	Slight	Low	Black oak-----	---	---	Eastern white pine, jack pine, red pine.
	Slope/erodibility	Slope			Eastern white pine--	58	*****	
					Jack pine-----	49	57.00	
					Northern pin oak----	48	29.00	
					Red pine-----	55	86.00	
Perrinton----	Severe	Unsuited	Slight	Low	American basswood---	---	---	Eastern white pine, northern red oak, northern white-cedar, white spruce.
	Slope	Slope			Eastern white pine--	---	---	
					Northern red oak----	69	57.00	
					Red maple-----	---	---	
					Sugar maple-----	---	---	
					White ash-----	---	---	
111B:								

\*See footnote at end of table.

Forestland Productivity and Management--Continued

Map symbol and soil name	Erosion hazard potential	Site preparation limitations	Windthrow hazard potential	Potential Seedling Mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
Plainfield, Banded substratum--	Slight	Well suited	Slight	Low	Bigtooth aspen-----	---	---	Eastern white pine, jack pine, red pine.
					Black oak-----	55	43.00	
					Eastern white pine--	58	*****	
					Jack pine-----	---	---	
					Red pine-----	55	86.00	
					White oak-----	50	29.00	
111C: Plainfield, Banded substratum--	Moderate	Well suited	Slight	Low	Bigtooth aspen-----	---	---	Eastern white pine, jack pine, red pine.
					Black oak-----	55	43.00	
					Eastern white pine--	58	*****	
					Jack pine-----	---	---	
					Red pine-----	55	86.00	
					White oak-----	50	29.00	
112B: Plainfield, Wet substratum--	Slight	Well suited	Slight	Low	Bigtooth aspen-----	---	---	Eastern white pine, jack pine, red pine.
					Black oak-----	55	43.00	
					Eastern white pine--	58	*****	
					Jack pine-----	---	---	
					Northern red oak----	55	43.00	
					Red pine-----	55	86.00	
					White oak-----	50	29.00	
115B: Plainfield, Banded substratum--	Slight	Well suited	Slight	Low	Bigtooth aspen-----	---	---	Eastern white pine, jack pine, red pine.
					Black oak-----	55	43.00	
					Eastern white pine--	58	*****	
					Jack pine-----	---	---	
					Red pine-----	55	86.00	
					White oak-----	50	29.00	
Plainfield, Loamy substratum--	Slight	Well suited	Slight	Low	Eastern white pine--	58	*****	Norway spruce, eastern white pine, jack pine, red pine.
					Jack pine-----	---	---	
					Northern pin oak----	---	---	
					Red pine-----	58	*****	
121B: Grattan, Banded substratum--	Slight	Well suited	Slight	Low	Black oak-----	66	57.00	Eastern white pine, red pine.
					Eastern white pine--	62	*****	
					Northern red oak----	65	72.00	
					Quaking aspen-----	---	---	
					Red maple-----	62	43.00	
					Red pine-----	---	---	
					White oak-----	53	43.00	

\*See footnote at end of table.

Forestland Productivity and Management--Continued

Map symbol and soil name	Erosion hazard potential	Site preparation limitations	Windthrow hazard potential	Potential Seedling Mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
121C: Grattan, Banded substratum--	Moderate	Well suited	Slight	Low	Black oak-----	66	57.00	Eastern white pine, red pine.
					Eastern white pine--	62	*****	
					Northern red oak----	65	72.00	
					Quaking aspen-----	---	---	
					Red maple-----	62	43.00	
					Red pine-----	---	---	
					White oak-----	53	57.00	
122B: Grattan, Wet substratum--	Slight	Well suited	Slight	Low	Black oak-----	72	57.00	Eastern white pine, red pine.
					Eastern white pine--	62	*****	
					Quaking aspen-----	---	---	
					Red maple-----	---	---	
					White oak-----	65	57.00	
125B: Grattan, Banded substratum--	Slight	Well suited	Slight	Low	Black oak-----	72	57.00	Eastern white pine, red pine.
					Eastern white pine--	62	*****	
					Northern red oak----	72	72.00	
					Quaking aspen-----	---	---	
					Red maple-----	62	43.00	
					Red pine-----	---	---	
					White oak-----	65	57.00	
Spinks-----	Slight	Well suited	Slight	Low	Black cherry-----	---	---	Eastern white pine, red pine.
					Black oak-----	---	---	
					Northern red oak----	66	57.00	
					Quaking aspen-----	---	---	
					Red maple-----	---	---	
					White oak-----	---	---	
125C: Grattan, Banded substratum--	Moderate	Well suited	Slight	Low	Black oak-----	72	57.00	Eastern white pine, red pine.
					Eastern white pine--	62	*****	
					Northern red oak----	72	72.00	
					Quaking aspen-----	---	---	
					Red maple-----	62	43.00	
					Red pine-----	---	---	
					White oak-----	65	57.00	
Spinks-----	Moderate	Well suited	Slight	Low	Black cherry-----	---	---	Eastern white pine, red pine.
					Black oak-----	---	---	
					Northern red oak----	66	57.00	
					Quaking aspen-----	---	---	
					Red maple-----	---	---	
					White oak-----	---	---	
125E:								

\*See footnote at end of table.

Forestland Productivity and Management--Continued

Map symbol and soil name	Erosion hazard potential	Site preparation limitations	Windthrow hazard potential	Potential Seedling Mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
Grattan, Banded substratum--	Moderate	Poorly suited	Slight	Low	Black oak-----	72	57.00	Eastern white pine, red pine.
	Slope/erodibility	Slope			Eastern white pine--	62	*****	
					Northern red oak----	72	72.00	
					Quaking aspen-----	---	---	
					Red maple-----	62	43.00	
					Red pine-----	---	---	
Spinks-----	Moderate	Poorly suited	Slight	Low	White oak-----	65	57.00	Eastern white pine, red pine.
	Slope/erodibility	Slope			Black cherry-----	---	---	
					Black oak-----	---	---	
					Northern red oak----	66	57.00	
130B: Grattan-----	Slight	Well suited	Slight	Low	White oak-----	---	---	Eastern white pine, red pine.
					Black oak-----	---	---	
					Eastern white pine--	62	*****	
					Northern red oak----	---	---	
					Quaking aspen-----	---	---	
					Red maple-----	---	---	
Coloma-----	Slight	Well suited	Slight	Low	Sugar maple-----	59	43.00	Red pine.
					White oak-----	---	---	
					Black oak-----	---	---	
					Eastern white pine--	---	---	
130C: Grattan-----	Moderate	Well suited	Slight	Low	Northern pin oak----	49	29.00	Eastern white pine, red pine.
					Red maple-----	---	---	
					Black oak-----	---	---	
					Eastern white pine--	62	*****	
Coloma-----	Moderate	Well suited	Slight	Low	Quaking aspen-----	---	---	Red pine.
					Red maple-----	---	---	
					Sugar maple-----	59	43.00	
					White oak-----	---	---	
130E: Grattan-----	Moderate	Poorly suited	Slight	Low	Black oak-----	---	---	Eastern white pine, red pine.
	Slope/erodibility	Slope			Eastern white pine--	62	*****	
					Northern red oak----	---	---	
					Quaking aspen-----	---	---	
					Red maple-----	---	---	
					Sugar maple-----	59	43.00	
					White oak-----	---	---	

\*See footnote at end of table.

Forestland Productivity and Management--Continued

Map symbol and soil name	Erosion hazard potential	Site preparation limitations	Windthrow hazard potential	Potential Seedling Mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
Coloma-----	Moderate Slope/erodibility	Poorly suited Slope	Slight	Low	Black oak----- Eastern white pine-- Northern pin oak---- Red maple-----	--- --- 49 ---	--- --- 29.00 ---	Red pine.
131B: Grattan, Banded substratum--	Slight	Well suited	Slight	Low	Eastern white pine-- Northern red oak---- Quaking aspen----- Red maple----- White oak-----	62 72 --- 62 65	***** 72.00 --- 43.00 57.00	Eastern white pine, red pine.
Coloma-----	Slight	Well suited	Slight	Low	Black oak----- Eastern white pine-- Northern pin oak---- Red maple----- Red pine-----	--- --- 49 --- ---	--- --- 29.00 --- ---	Eastern white pine, red pine.
131C: Grattan, Banded substratum--	Moderate	Well suited	Slight	Low	Eastern white pine-- Northern red oak---- Quaking aspen----- Red maple----- White oak-----	62 72 --- 62 65	***** 72.00 --- 43.00 57.00	Eastern white pine, red pine.
Coloma-----	Moderate	Well suited	Slight	Low	Eastern white pine-- Northern pin oak---- Red maple----- Red pine-----	--- 49 --- ---	--- 29.00 --- ---	Eastern white pine, red pine.
131E: Grattan, Banded substratum--	Moderate Slope/erodibility	Poorly suited Slope	Slight	Low	Eastern white pine-- Northern red oak---- Quaking aspen----- Red maple----- White oak-----	62 72 --- 62 65	***** 72.00 --- 43.00 57.00	Eastern white pine, red pine.
Coloma-----	Moderate Slope/erodibility	Poorly suited Slope	Slight	Low	Eastern white pine-- Northern pin oak---- Red maple----- Red pine-----	--- 49 --- ---	--- 29.00 --- ---	Eastern white pine, red pine.
135B:								

\*See footnote at end of table.

Forestland Productivity and Management--Continued

Map symbol and soil name	Erosion hazard potential	Site preparation limitations	Windthrow hazard potential	Potential Seedling Mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
Grattan, Banded substratum--	Slight	Well suited	Slight	Low	Eastern white pine--	62	*****	Eastern white pine, red pine.
					Northern red oak----	72	72.00	
					Quaking aspen-----	---	---	
					Red maple-----	62	43.00	
					White oak-----	65	57.00	
Metea-----	Slight	Well suited	Slight	Low	American basswood---	---	---	Northern red oak, red pine, white spruce.
					Black cherry-----	---	---	
					Northern red oak----	68	57.00	
					Red maple-----	---	---	
					Sugar maple-----	---	---	
135C: Grattan-----	Moderate	Well suited	Slight	Low	Eastern white pine--	62	*****	Eastern white pine, red pine.
					Northern red oak----	72	72.00	
					Quaking aspen-----	---	---	
					Red maple-----	62	43.00	
					White oak-----	65	57.00	
Metea-----	Moderate	Well suited	Slight	Low	American basswood---	---	---	Northern red oak, red pine, white spruce.
					Black cherry-----	---	---	
					Northern red oak----	68	57.00	
					Red maple-----	---	---	
					Sugar maple-----	---	---	
135E: Grattan, Banded substratum--	Moderate	Poorly suited	Slight	Low	Eastern white pine--	62	*****	Eastern white pine, red pine.
					Northern red oak----	77	72.00	
					Quaking aspen-----	---	---	
					Red maple-----	72	43.00	
					White oak-----	65	57.00	
Metea-----	Moderate	Poorly suited	Slight	Low	American basswood---	---	---	Northern red oak, red pine, white spruce.
					Black cherry-----	---	---	
					Northern red oak----	68	57.00	
					Red maple-----	---	---	
					Sugar maple-----	---	---	
135F:	Slight	Well suited	Slight	Low	Eastern white pine--	62	*****	Eastern white pine, red pine.
					Northern red oak----	72	72.00	
					Quaking aspen-----	---	---	
					Red maple-----	62	43.00	
					White oak-----	65	57.00	

\*See footnote at end of table.

Forestland Productivity and Management--Continued

Map symbol and soil name	Erosion hazard potential	Site preparation limitations	Windthrow hazard potential	Potential Seedling Mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
Grattan, Banded substratum--	Severe	Unsuited	Slight	Low	Eastern white pine--	62	*****	Eastern white pine, red pine.
	Slope/erodibility	Slope			Northern red oak----	77	72.00	
					Quaking aspen-----	---	---	
					Red maple-----	72	43.00	
Metea-----	Severe	Unsuited	Slight	Low	White oak-----	65	57.00	Northern red oak, red pine, white spruce.
					American basswood---	---	---	
	Slope/erodibility	Slope			Black cherry-----	---	---	
					Northern red oak----	68	57.00	
137B: Metea-----	Slight	Well suited	Slight	Low	Red maple-----	---	---	Northern red oak, red pine, white spruce.
					Sugar maple-----	---	---	
					White oak-----	---	---	
					American basswood---	---	---	
Tustin-----	Slight	Well suited	Slight	Low	Black cherry-----	---	---	Norway spruce, eastern white pine, red pine.
					Northern red oak----	68	57.00	
					Red maple-----	---	---	
					Sugar maple-----	---	---	
137C: Metea-----	Moderate	Well suited	Slight	Low	White oak-----	---	---	Northern red oak, red pine, white spruce.
					American basswood---	---	---	
					Black cherry-----	---	---	
					Northern red oak----	68	57.00	
Tustin-----	Moderate	Well suited	Slight	Low	Red maple-----	---	---	Red pine.
					Sugar maple-----	---	---	
					White oak-----	---	---	
					Black oak-----	55	43.00	
147C:					Red pine-----	---	---	

\*See footnote at end of table.

Forestland Productivity and Management--Continued

Map symbol and soil name	Erosion hazard potential	Site preparation limitations	Windthrow hazard potential	Potential Seedling Mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
Marlette-----	Slight	Well suited	Slight	Low	American basswood---	---	---	Black walnut, eastern white pine, red pine, white spruce.
					American beech-----	---	---	
					Black cherry-----	---	---	
					Black oak-----	---	---	
					Eastern hophornbeam-	---	---	
					Northern red oak---	86	86.00	
					Sugar maple-----	65	43.00	
					White ash-----	85	86.00	
Metea-----	Slight	Well suited	Slight	Low	American basswood---	---	---	Red pine, white spruce.
					Black cherry-----	---	---	
					Black walnut-----	---	---	
					Northern red oak---	86	86.00	
					Sugar maple-----	76	43.00	
					White oak-----	---	---	
181: Histosols-----	Slight	Well suited	Severe Wetness	High Wetness	Black spruce-----	---	---	---
182: Histosols-----	Slight	Well suited	Severe Wetness	High Wetness	American basswood---	---	---	---
					Northern white-cedar	---	---	
DAM: Dam-----	Not rated	Not rated	Not rated	Not rated Horizon table contains no data		---		---

\*See footnote at end of table.

Forestland Productivity and Management--Continued

ENDNOTE--FORESTLAND INTERPRETATIONS

The information in the above table can help forest owners or managers plan the use of soil for wood crops. They show the potential productivity of the soils for wood crops and rate the soils according to the limitations that affect various aspects of forest management.

The POTENTIAL PRODUCTIVITY of merchantable or COMMON TREES on a soil is expressed as a SITE INDEX and as a volume number. The site index is the average height, in feet, that dominant and codominant trees of a given species attain in a specified number of years. The site index applies to fully stocked, even aged, unmanaged stands. Commonly grown trees are those that forest managers generally favor in intermediate or improvement cuttings. They are selected on the basis of growth rate, quality, value and marketability.

The VOLUME OF WOOD FIBER, a number, is the yield likely to be produced by the most important tree species. This number, expressed as cubic feet per acre per year and calculated at the age of culmination of the mean annual increment (CMAI), indicates the amount of fiber produced in a fully stocked, even aged, unmanaged stand.

TREES TO MANAGE are those that are preferred for planting, seeding, or natural regeneration and those that remain in the stand after thinning or partial harvest.

Interpretative ratings are given for various aspects of forest management. Some rating class terms indicate the degree to which the soils are suited to a specified forest management practice. Well suited indicates that the soil has features that are favorable for the specified practice and has no limitations. Good performance can be expected, and little or no maintenance is needed. Moderately suited indicates that the soil has features that are moderately favorable for the specified practice. One or more soil properties are less than desirable, and fair performance can be expected. Some maintenance is needed. Poorly suited indicates that the soil has one or more properties that are unfavorable for the specified practice. Overcoming the unfavorable properties requires special design, extra maintenance, and costly alteration. Unsited indicates that the expected performance of the soil is unacceptable for the specified practice or that extreme measures are needed to overcome the undesirable soil properties.

EROSION HAZARD POTENTIAL ratings are based on the soil erodibility factor K, slope, and content of rock fragments. The ratings apply to unsurfaced roads and trails. The hazard is described as slight, moderate, or severe. A rating of slight indicates that little or no erosion is likely; moderate indicates that some erosion is likely, that the roads or trails may require occasional maintenance; and that simple erosion-control measures are needed; and severe indicates that significant erosion is expected, that the roads or trails require frequent maintenance, and that costly erosion-control measures are needed.

SITE PREPARATION LIMITATIONS ratings are based on slope, depth to a restrictive layer, plasticity index, rock fragments on or below the surface, depth to a water table, and ponding. The soils are described as well suited, poorly suited, or unsited to this management activity. The part of the soil from the surface to a depth of about 1 foot is considered in the ratings.

Ratings in the column WINDTHROW HAZARD POTENTIAL is the likelihood that trees will be uprooted by wind because the soil is not deep enough for adequate root anchorage. The main restrictions that affect rooting are a seasonal high water table and the depth to bedrock, a fragipan, or other limiting layers. A rating of slight indicates that under normal conditions no trees are blown down by the wind. Strong winds may damage trees, but they do not uproot them. A rating of moderate indicates that some trees can be blown down during periods when the soil is wet and winds are moderate or strong. A rating of severe indicates that many trees can be blown down during these periods.

POTENTIAL SEEDLING MORTALITY ratings are based on flooding, ponding, depth to a water table, content of lime, reaction, salinity, available water capacity, soil moisture regime, soil temperature regime, aspect, and slope. The soils are described as having a low, moderate, or high potential for seedling mortality.

\*Volume is the yield in cubic feet per acre per year at the age of culmination of mean annual increment for fully stocked stands.